

What is claimed is:

1. A flexible screw type height control device, comprising:
 - a housing;
 - a servomotor mounted in the housing;
 - a driving gear, which is rotated by the servomotor;
 - a driven gear, which is provided with a spiral groove at a central portion thereof and is tooth-engaged with the driving gear;
 - a flexible screw member, which passes axially through the spiral groove of the driven gear and moves linearly upward and downward by the servomotor; and
 - a telescopic unit including a plurality of sliding members, which are slidably coupled to each other and cooperate with the flexible screw member.
2. The flexible screw type height control device of Claim 1, wherein the flexible screw member is a coil spring.
3. The flexible screw type height control device of Claim 1, wherein a first sliding member of the plurality of sliding members is slidably disposed in the housing, one end of the flexible screw member is extended outside the housing, and the other end of the flexible screw member is fixed to a last sliding member of the plurality of sliding members.
4. The flexible screw type height control device of Claim 3, wherein each sliding member is formed as an open-ended pipe and a cross-sectional area of the sliding members decreases from the first sliding member to the last sliding member.

5. The flexible screw type height control device of Claim 4, wherein the telescopic unit is received in the housing when the telescopic unit is in a completely retracted state.
6. The flexible screw type height control device of Claim 4, wherein the cross-section of the pipe is shaped as a circle.
7. The flexible screw type height control device of Claim 4, wherein the cross-section of the pipe is shaped as a polygon.
8. The flexible screw type height control device of Claim 3, wherein each sliding member has a ring shape,
the sliding members before the last sliding member are provided with at least one support rod, which is extended toward the next sliding member, and
the sliding members after the first sliding member are provided with at least one first through-hole through which the support rod of the prior sliding member passes.
9. The flexible screw type height control device of Claim 8, wherein the sliding members after the second sliding member are provided with at least one second through-hole through which the support rod of the prior sliding members passes.
10. The flexible screw type height control device of Claim 9, wherein the support rod includes a cylindrical body and an enlarged stepped part, which is detachably coupled to the bottom of the body,
the diameter of the first through-hole is larger than that of the body of the support rod, but smaller than that of the stepped part, and

the diameter of the second through-hole is larger than that of the stepped part.

11. The flexible screw type height control device of Claim 1, further comprising rollers, which are mounted in the housing for guiding the movement of the flexible screw member.